



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/063,123

03/22/2002

James DeMaggio

201-0451 MS

5944

22844 7590 01/05/2007
FORD GLOBAL TECHNOLOGIES, LLC
FAIRLANE PLAZA SOUTH, SUITE 800
330 TOWN CENTER DRIVE
DEARBORN, MI 48126

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT

PAPER NUMBER

3694

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

01/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/063,123

Applicant(s)

DEMAGGIO, JAMES

Examiner

Susanna M. Diaz

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 26-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This non-final Office action is responsive to Applicant's election filed October 11, 2006. Applicant has elected Group I (claims 1-25) without traverse. Non-elected claims 26-51 stand as non-elected.

Claims 1-25 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kondo et al. (US 2003/0178481).

Kondo discloses a system for generating a transportation schedule used in transporting goods from a first supplier and from a second supplier to a plant comprising:

[Claim 20] an input device to receive logistics data (¶¶ 15, 34),

said logistics data comprising information relating to *at least one of* a plant time range, an estimated plant shipment time, an estimated first cross dock shipment time,

and an estimated second cross dock shipment time, a controller to determine the transportation schedule based on said logistics data (¶¶ 15, 28-34),

said controller comprising a processor and a memory (¶¶ 34-35), and

an output device to generate said transportation schedule (¶¶ 28-30, 32 --

Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that "the supplies may be received shortly before they are needed" (¶ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in ¶ 25. The supplies are delivered as requested, as seen in ¶ 27. "The timing of shipments from suppliers to delivery at assembly plants is coordinated... The supplies are labeled by the supplier with a bar code that identifies a delivery time... The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location." (¶ 15) Electronic communication links are established among all involved parties, as seen in ¶ 34),

[Claim 21] wherein said controller is programmed to receive the logistics data from the input device and to cause the output device to generate said transportation schedule (¶¶ 15, 28-30, 32-35).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (US 2003/0178481) in view of Braun (U.S. Patent No. 6,341,266).

Kondo discloses a method for transporting goods comprising:

[Claim 1] (a) determining that a first set of goods, located at a first supplier, and a second set of goods, located at a second supplier, are desired at a plant during a plant time range (¶¶ 25-32),

(b) estimating a plant shipment time (¶¶ 28, 30, 32),

(c) estimating a first cross dock shipment time (¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed),

(d) estimating a second cross dock shipment time (¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed),

(e) determining a first scheduled pickup time range based on said plant time range, said estimation of said plant shipment time, and said estimation of said first cross dock shipment time (¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are

needed. In order to know when to transport ordered supplies to a plant so that “the supplies may be received shortly before they are needed” (¶ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in ¶ 25. The supplies are delivered as requested, as seen in ¶ 27. “The timing of shipments from suppliers to delivery at assembly plants is coordinated...The supplies are labeled by the supplier with a bar code that identifies a delivery time...The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location.” (¶ 15)),

(f) determining a second scheduled pickup time range based on said plant time range, said estimation of said plant shipment time, and said estimation of said second cross dock shipment time (¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that “the supplies may be received shortly before they are needed” (¶ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in ¶ 25. The supplies are delivered as requested, as seen in ¶ 27. “The timing of shipments from suppliers to delivery at assembly plants is coordinated...The supplies are labeled by the supplier with a bar code that identifies a delivery time...The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location.” (¶ 15)),

(g) picking up said first set of goods from said first supplier during said first scheduled pickup time range (¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that "the supplies may be received shortly before they are needed" (¶ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in ¶ 25. The supplies are delivered as requested, as seen in ¶ 27. "The timing of shipments from suppliers to delivery at assembly plants is coordinated...The supplies are labeled by the supplier with a bar code that identifies a delivery time...The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location." (¶ 15)),

(h) delivering said first set of goods to said cross dock location (¶¶ 15, 25, 27-32),

(i) picking up said second set of goods from said second supplier during said second scheduled pickup time range (¶¶ 15, 25, 27-32),

(j) delivering said second set of goods to said cross dock location (¶¶ 15, 25, 27-32),

(k) combining said first set of goods and said second set of goods into a combination of goods (Figs. 2, 3; ¶¶ 27-28), and

(l) delivering said combination of goods to said plant during said plant time range (¶¶ 25-32),

[Claim 2] associating a first unique identifier with said first set of goods and associating a second unique identifier with said second set of goods (§§ 31, 33),

[Claim 3] wherein said first unique identifier is indicative of at least one of an origin code, a product code, a quantity code, and an item characteristic code (§§ 31, 33),

[Claim 4] wherein said plant is a supplier at a first tier and said first supplier is a supplier at a second tier, wherein said first tier is higher than said second tier (Figs. 2, 3; §§ 27-28 -- The plant's tier is higher than the first supplier's tier in the sense that the plant's orders drive the first supplier's plans for order fulfillment),

[Claim 5] transmitting the first scheduled pickup time range to the first supplier and transmitting the second scheduled pickup time range to the second supplier (§§ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that "the supplies may be received shortly before they are needed" (§ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in § 25. The supplies are delivered as requested, as seen in § 27. "The timing of shipments from suppliers to delivery at assembly plants is coordinated... The supplies are labeled by the supplier with a bar code that identifies a delivery time... The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location." (§ 15) Electronic communication links are established among all involved parties, as seen in § 34),

Art Unit: 3694

[Claim 8] wherein the step of estimating a plant shipment time comprises the step of receiving a time of day during which travel is to take place (¶¶ 15, 28-32 -- Travel is scheduled such that the delivery arrives at the plant in time),

[Claim 11] wherein the step of estimating a first cross dock shipment time comprises the step of receiving a time of day during which travel is to take place (¶¶ 15, 28-32 -- Travel is scheduled such that the delivery arrives at the plant in time),

[Claim 13] picking up a third set of goods and delivering said third set of goods to said first supplier during said first scheduled pickup time range (Figs. 2, 3; ¶¶ 25-32),

[Claim 14] wherein said third set of goods is located at said cross dock location (Figs. 2, 3; ¶¶ 25-32),

[Claim 15] wherein said third set of goods is located at a second cross dock location (Figs. 2, 3; ¶¶ 25-32),

[Claim 16] wherein said third set of goods is located at a third supplier (Figs. 2, 3; ¶¶ 25-32),

[Claim 18] transmitting said third scheduled pickup time range to said third supplier (¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that "the supplies may be received shortly before they are needed" (¶ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in ¶ 25. The supplies are delivered as requested, as seen in ¶ 27. "The timing of

Art Unit: 3694

shipments from suppliers to delivery at assembly plants is coordinated...The supplies are labeled by the supplier with a bar code that identifies a delivery time...The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location.” (§ 15) Electronic communication links are established among all involved parties, as seen in § 34).

Regarding claims 1, 7, and 10, Kondo states, “The timing of shipments from suppliers to delivery at assembly plants is coordinated...The supplies are labeled by the supplier with a bar code that identifies a delivery time...The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location.” (§ 15) Furthermore, delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that “the supplies may be received shortly before they are needed” (§ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in § 25. Kondo’s logistics planning involves the scheduling of various forms of transportation (§ 27). Kondo does not expressly teach that the various shipment times comprise a travel time (i.e., Kondo does not expressly teach that said plant shipment time comprises the time of travel between a cross dock location and the plant, said first cross dock shipment time comprises the time of travel between said first supplier and said cross dock location, and said second cross dock shipment time

Art Unit: 3694

comprises the time of travel between said second supplier and said cross dock location). However, Braun also discloses a two stage distribution network in which goods are supplied from a source (i.e., a manufacturer) to a final destination (i.e., a customer at a "distribution center") via an intermediate storage facility (i.e., a central warehouse). Braun specifically takes into account travel time to the central warehouse as well as the travel time between the central warehouse and the distribution center in order to more accurately optimize delivery planning (col. 8, lines 18-33). Similar to Kondo, Braun utilizes an intermediate storage location and bundles deliveries in order to make the delivery process more efficient and cost-effective (col. 8, lines 21-26, 52-56). Since Kondo clearly has delivery deadlines, factors affecting delivery travel time must be considered. As seen more explicitly in Braun, delivery travel time is one such factor that must typically be taken into account when planning to deliver a shipment on time; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Kondo such that said plant shipment time comprises the time of travel between a cross dock location and the plant, said first cross dock shipment time comprises the time of travel between said first supplier and said cross dock location, and said second cross dock shipment time comprises the time of travel between said second supplier and said cross dock location in order to facilitate more efficient and cost-effective scheduling of deliveries (as suggested in col. 8, lines 21-26, 52-56 of Braun).

Further regarding claims 7 and 10, neither Kondo nor Braun expressly teaches that actual travel times are retrieved from a database; however, Official Notice is taken

Art Unit: 3694

that it is old and well-known in the art of route planning to store and retrieve actual travel times from a database. Access to such data helps to facilitate quick calculations requiring travel time information. As discussed above, the Kondo-Braun combination uses travel times for efficiently and cost-effectively planning deliveries; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Kondo-Braun combination wherein the step of estimating a plant shipment time comprises the step of retrieving actual travel times from a database (claim 7) and wherein the step of estimating a first cross dock shipment time comprises the step of retrieving actual travel times from a database (claim 10) so that the Kondo-Braun combination can more quickly access data regarding actual travel times to more efficiently and cost-effectively plan deliveries.

As per claim 17, Kondo generally determines a third scheduled pickup time range and coordinates said third scheduled pickup time range based on said first scheduled pickup time range, e.g., various types of supplies that are needed within the same time range may be consolidated and shipped to the plant together (Figs. 2, 3; ¶¶ 28-30, 32 -- Delivery times are scheduled for each set of supplies so that the supplies arrive at the respective plant shortly before they are needed. In order to know when to transport ordered supplies to a plant so that "the supplies may be received shortly before they are needed" (¶ 32), there must be an estimation of when the ordered supplies need to leave the cross dock. The suppliers receive order requirements for anywhere up to three days, i.e., a range of time, before the supplies are needed, as seen in ¶ 25. The supplies are delivered as requested, as seen in ¶ 27. "The timing of shipments from

Art Unit: 3694

suppliers to delivery at assembly plants is coordinated... The supplies are labeled by the supplier with a bar code that identifies a delivery time... The supplies are then staged for delivery to the appropriate assembly plant at an appropriate time and assembly plant line location.” (¶ 15) Electronic communication links are established among all involved parties, as seen in ¶ 34). Kondo does not expressly teach that this determination is based on an estimation of the time of travel between said third supplier and said first supplier. However, Braun also discloses a two stage distribution network in which goods are supplied from a source (i.e., a manufacturer) to a final destination (i.e., a customer at a “distribution center”) via an intermediate storage facility (i.e., a central warehouse). Braun specifically takes into account travel time to the central warehouse as well as the travel time between the central warehouse and the distribution center in order to more accurately optimize delivery planning (col. 8, lines 18-33). Similar to Kondo, Braun utilizes an intermediate storage location and bundles deliveries in order to make the delivery process more efficient and cost-effective (col. 8, lines 21-26, 52-56). Since Kondo clearly has delivery deadlines, factors affecting delivery travel time must be considered. As seen more explicitly in Braun, delivery travel time is one such factor that must typically be taken into account when planning to deliver a shipment on time; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to modify Kondo such that the determination of the third scheduled pickup time range is based on an estimation of the time of travel between said third supplier and said first supplier in order to facilitate more

efficient and cost-effective scheduling of deliveries of bundled/consolidated supplies (as suggested in col. 8, lines 21-26, 52-56 of Braun).

Regarding claims 6 and 19, Kondo discloses the steps of transmitting the first scheduled pickup time range to the first supplier and transmitting said third scheduled pickup time range to said third supplier (as discussed in the rejection of claim 1 above), yet neither Kondo nor Braun expressly teaches the transmission of such information via the Internet. Kondo does, however, state that the "communication links may be modem connections, direct telephone line connections, cable connections, etc." (§ 34)

Additionally, Official Notice is taken that it is old and well-known in the art of communications to access the Internet via modem connections, telephone line connections, and cable connections. Also, it is old and well-known that the Internet facilitates relatively quick and inexpensive communications on a global level. Since Kondo and Braun are connecting suppliers and customers in different locations, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Kondo-Braun combination to transmit data (including the first scheduled pickup time range and said third scheduled pickup time range) via the Internet in order to facilitate relatively quick and inexpensive communications on a global level.

Regarding claims 9 and 12, neither Kondo nor Braun expressly teaches that weather is taken into account when estimating shipment times (i.e., neither Kondo nor Braun expressly teaches that the step of estimating a plant shipment time comprises the step of receiving data indicative of weather condition and the step of estimating a first

Art Unit: 3694

cross dock shipment time comprises the step of receiving data indicative of a weather condition). However, Kondo does emphasize that time is of the essence when getting the plants the supplies they need, right before they need them (§§ 28-29, 32). Official Notice is taken that it is old and well-known in the art of delivery planning that weather is often a factor in travel times. As discussed above, the Kondo-Braun combination addresses the importance of using travel times to plan deliveries. In situations where weather can significantly slow down travel time, it would be important to adjust a delivery schedule accordingly; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Kondo-Braun combination such that the step of estimating a plant shipment time comprises the step of receiving data indicative of weather condition and the step of estimating a first cross dock shipment time comprises the step of receiving data indicative of a weather condition in order to facilitate more accurate delivery planning, especially in situations where weather can significantly slow down travel time.

6. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (US 2003/0178481), as applied to claim 20 above.

[Claims 22-25] Regarding claims 22-25, Kondo does not expressly teach the transmission of information via the Internet. Kondo does, however, state that the "communication links may be modem connections, direct telephone line connections, cable connections, etc." (§ 34). Additionally, Official Notice is taken that it is old and well-known in the art of communications to access the Internet via modem connections,

telephone line connections, and cable connections (e.g., using a network interface card). Also, it is old and well-known that the Internet facilitates relatively quick and inexpensive communications on a global level. Since Kondo connects suppliers and customers in different locations, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Kondo such that the input device comprises a network interface card (claim 22), the network interface card is operatively coupled to the Internet (claims 23, 25), and the output device comprises a network interface card (claim 24) in order to facilitate relatively quick and inexpensive communications on a global level.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hancock (US 2003/0009361) -- Discloses a method and system for interfacing with a shipping service. A logistics node coordinates shipping with a source and destination of the shipment.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone

Art Unit: 3694

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Susanna M. Diaz
Primary Examiner
Art Unit 3694

December 22, 2006